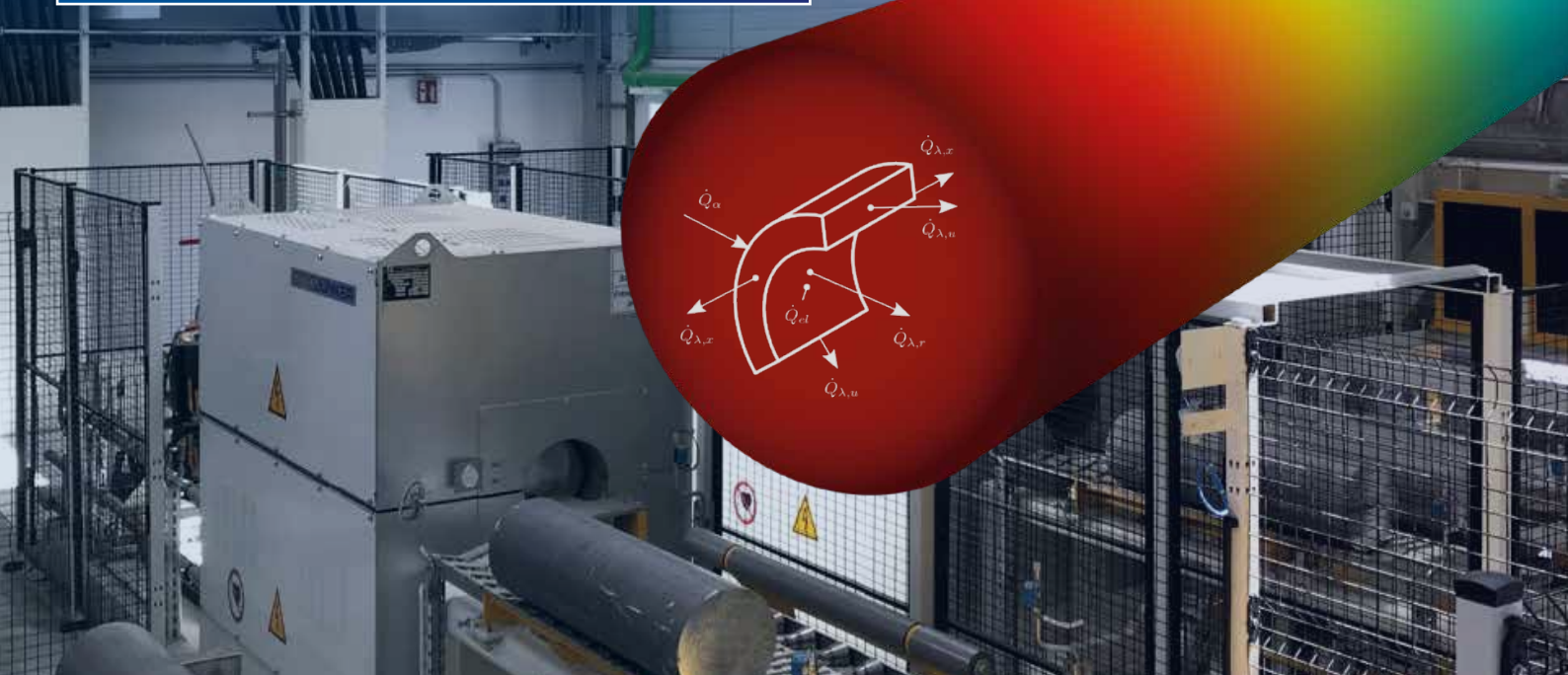
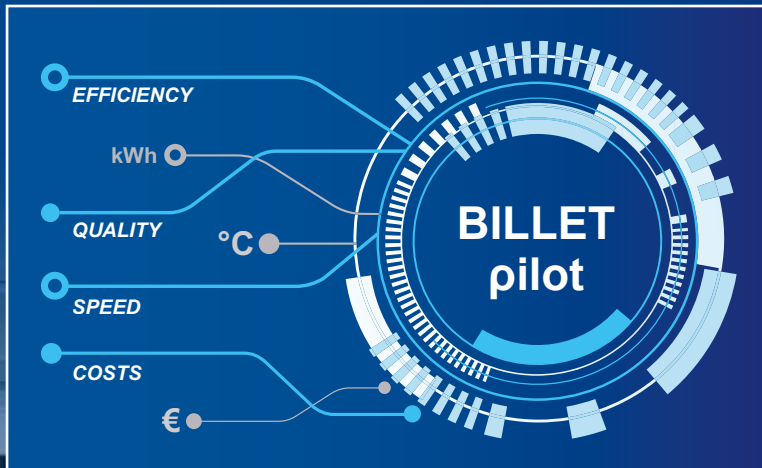


BILLET pilot



MATHEMATICAL MODEL

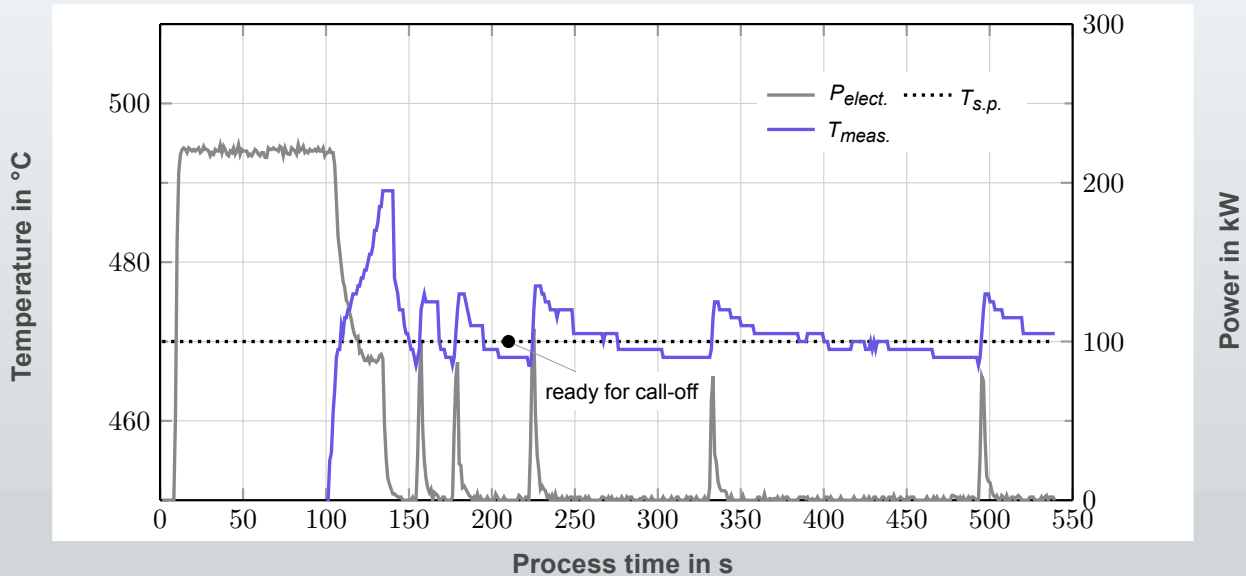
FOR OPTIMIZATION OF YOUR INDUCTION BILLET HEATER PLANT



EFFICIENT USE OF ENERGY FOR EFFICIENT PRODUCTION

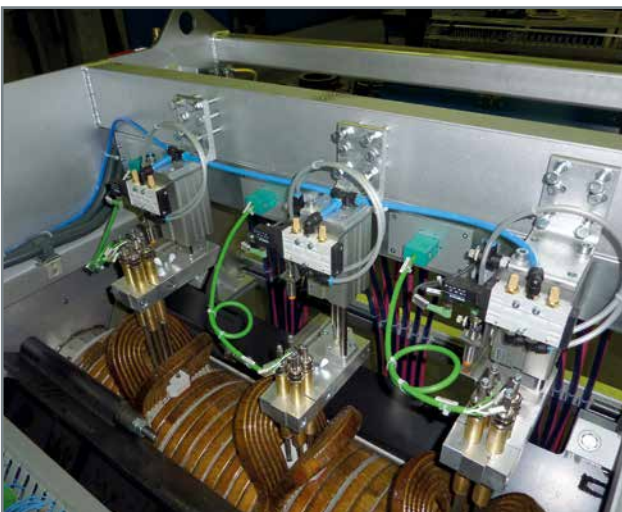
Conventional Process Management

by means of thermocouples



Complexity of the conventional temperatur measurement and its negative impact

- Temperature measurement by pressing the thermocouples onto the billet
- Measuring inaccuracies by oxide layer on the billet surface
- Wear of thermocouples causes incorrect measurements
- Wear of thermocouples causes additional maintenance

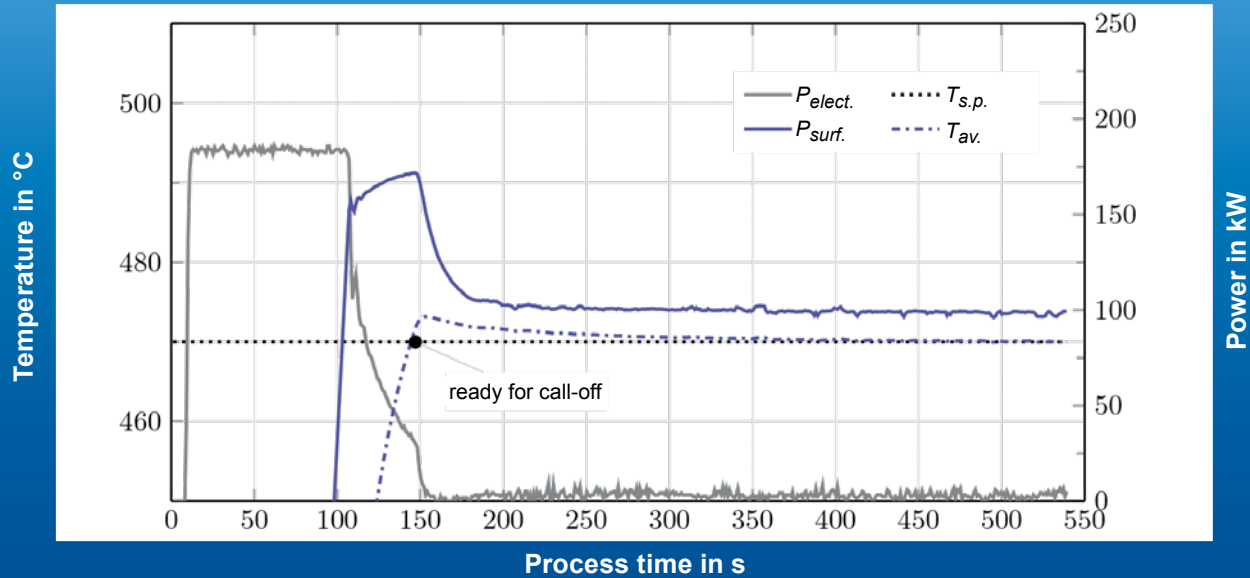


Potential

- Quicker readiness for billet call-off
- Reproducibility of billet temperatures with or without taper
- Longer thermocouple service life
- Efficient energy input
- Less maintenance

State-of-the-art Process Management

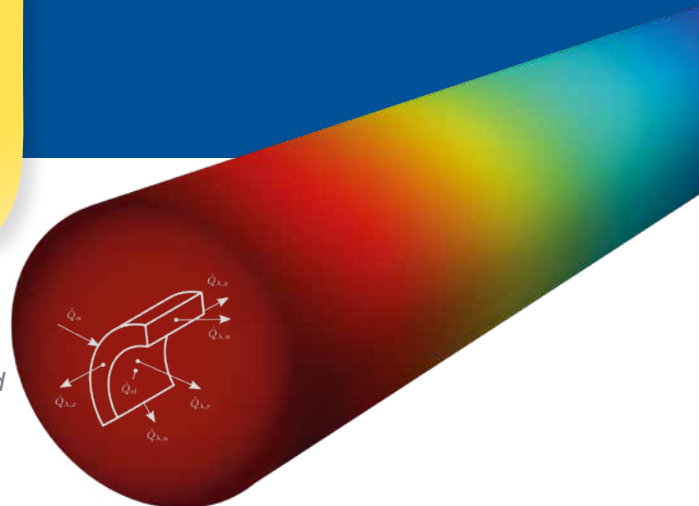
by mathematical model „BILLET pilot“



This is what you may expect

- Shorter cycle times due to quicker readiness for billet call-off
- Permanent reduction of costs and resources due to efficient use of energy
- Less thermocouple maintenance

OTTOJUNKER have developed the mathematical model and already installed and optimized it at the plant of a renowned German aluminium profile supplier.



The integrated process model calculates the temperature distribution throughout the billet by means of the electrical power input of the induction coils. All the conventional press-on thermocouples can do is determine the surface temperature.

Based on the known temperature distribution, the model can make best use of the setpoint temperature overshoot thus reducing the heating-up time.

The model allows a better power control thus improving the process repeatability.

You can continue to use the existing press-on thermocouples as an additional safety feature, but these will require less maintenance since only one measurement per billet is required.

BILLET pilot



MATHEMATICAL MODEL

FOR OPTIMIZATION OF YOUR INDUCTION BILLET HEATER PLANT

The integrated "BILLET pilot" process model is the ideal update for the heating process of induction billet heater plants. By calculating the temperature distribution in the billet in real time, heat input can be optimized and the heating-up time can be reduced.

OTTOJUNKER offer you a process model tailor-made for the production with your existing billet heater plant which will be generated and commissioned together with you. We supply the necessary hardware and software and integrate the model into your existing control software.

Please do not hesitate to contact us.



*We will be pleased
to advise you!*

04/2022

EFFICIENT USE OF ENERGY FOR EFFICIENT PRODUCTION

OTTO JUNKER GmbH

Jaegerhausstr. 22
52152 Simmerath
Germany

Phone: +49 2473 601-0
Email: sales@otto-junker.com
www.otto-junker.com

